AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0019] with the following amended paragraph:

[0019] The optical stop 204 is positioned in the cold space 210 at the limiting aperture in the transmission path where the incident energy has a first crossover point A. The position of the optical stop 204 may be abutting the lens 206 or it may abut the IR transmissive window 202 and will be determined by the wavelengths of energy to be detected and the characteristics of the other optical components. In a preferred embodiment, the optical stop 204 may be from 20/1000th to 60/1000th of an inch from the lens 206; more preferably the optical stop 204 is 40/1000th of an inch from the lens 206. The optical stop 204 has an opening 212 circularly symmetric about axis X-X', the radius of which is the size of the cross-section of the caustic at the first crossover point A. The caustic is the envelope curve of the transmitted beam. The optical stop 204 helps to prevent stray energy from traveling down the transmission path toward the lens 206 and thus improves optical performance. By placing the optical stop 204 within the cold space 210 and in front of the lens 206, design requirements are simplified while still maintaining the required cold shield efficiency.

Please replace paragraph [0022] with the following amended paragraph:

[0022] A detector 208 is positioned in alignment with the other components of the optical subassembly 200 about the axis X-X' at a focal length distance d from the second surface 216 of the lens 206, at a coincident focal plane to at least 2 wavelengths manipulated and transmitted by the lens 206 and the HOE 222. The detector ~~222~~ 208 can discriminate at least two, and preferably multiple, wavelengths

of incident energy in the IR spectrum, and more preferably wavelengths at 3-12 μm. The detector 208 processes the wavelengths to produce multiple waveband detection capability within a single detector. In one embodiment, the detector 208 concurrently collects radiation from multiple, adjacent spectral radiation bands. This type of detector may be used in "hyperspectral imaging." An example of such a detector is disclosed in co-assigned U.S. Patent No. 6,180,990 B1, issued to Claiborne et al., the disclosure of which is incorporated herein by reference.